

# ULTRASONIC INSPECTING APPARATUS, ULTRASONIC TRANSDUCER, AND INSPECTING APPARATUS

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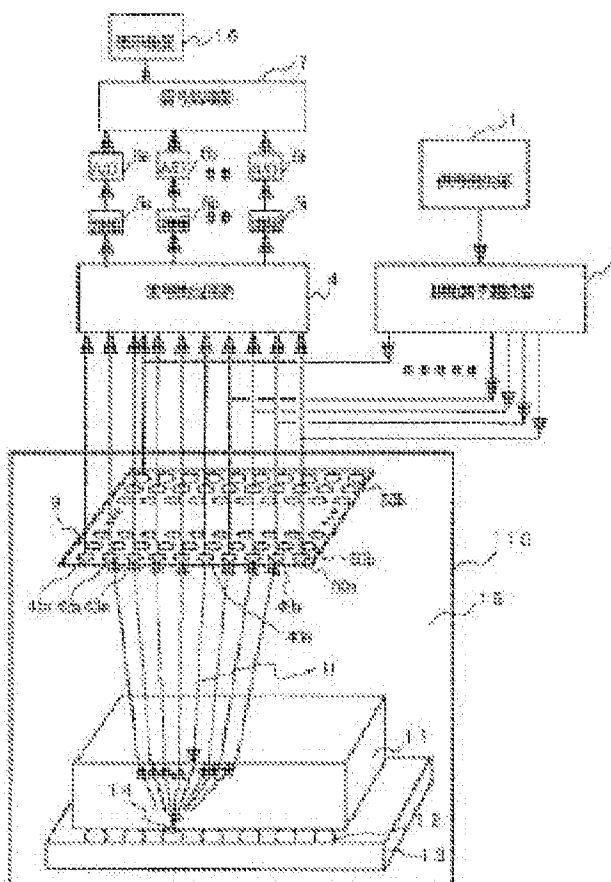
 JP4087098 (B2)

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## Abstract of JP 2003149213 (A)

**PROBLEM TO BE SOLVED:** To provide an ultrasonic inspecting apparatus, an ultrasonic transducer, and an inspecting apparatus capable of easily and speedily performing inspection with high resolution. **SOLUTION:** Barium titanates ( $\text{BaTiO}_3$ ) or lead zirconate titanates (PZT) are used for a piezoelectric body constituting the ultrasonic transducer, and its thickness is between 0.1-100  $\mu\text{m}$ . The ultrasonic transducer is provided with a drive part capable of driving any one among piezoelectric layers, a detecting part for detecting electric signals generated by the plurality of the piezoelectric layers from echoes from an object to be irradiated with ultrasonic waves generated by the driven piezoelectric layers, and a processing part for processing the state of the object to be irradiated from the detected electric signals so as to be visualized.



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